



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,209	09/29/2003	Shoji Iwasa	O11.2B-11333-US01	2521
490	7590	12/29/2005	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,209

Applicant(s)

IWASA, SHOJI

Examiner

Michael A. Marcheschi

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/23/05 AND 12/14/05.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 1755

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new matter added to claim 1 is the limitation “**larger than** 0.01% by weight and **smaller than** 3% by weight” because the specification does not literally define this range. Although the specification defines a range of “0.01% by weight to 3% by weight”, this range is **inclusive** of the endpoints but the newly amended claimed range is exclusive of said endpoints, thus the newly amended range is not literally supported by the original disclosure.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as obvious over Inoue et al. (672) in view of Sasaki.

Inoue et al. (672) teach in section [0022]-[0049], a composition comprising silica (claimed amount), 0.005-0.3 wt% of a water soluble polymer, an alkaline compound and water.

Art Unit: 1755

The water soluble polymer is not specifically limited, but hydroxyethyl cellulose is specifically defined. Combinations of water soluble polymers can be used in a ratio.

Sasaki teaches in column 21, line 9-column 22, line 45 and the claims, a composition comprising silica (claimed amount), ammonia, water and at least one water soluble polymer (20-1000 ppm). Polyethylene oxide and hydroxypropyl cellulose are specifically defined as the water soluble polymeric material. The molecular weight of the polymer is also defined.

The primary reference teaches that a combination of water soluble polymers can be used and specifically mentions hydroxyethyl cellulose. Since polyethylene oxide is a well known water soluble polymer, as shown by the secondary reference, its use in combination with hydroxyethyl cellulose is within the scope of the reference and obvious to the skilled artisan. This is apparent because the reference specifically states that combinations of water soluble polymers can be used. In addition and assuming *arguendo* about this, the combination aspect would have been obvious because it is *prima facie* obvious to combine two or more materials disclosed by the prior art to form a third material (combination of water soluble polymers) that is to be used for the same purpose. In re Kerkhoven 205 USPQ 1069. With respect to the amounts, since the above combination is obvious, the individual amounts must fall within the primary reference range for the entire water soluble polymer, thus as can be seen the individual amounts can fall within the claimed range. In other words, if the total polymer concentration is to be within the reference range, this suggests that the individual amounts can be any and all amounts as long as the total amount is within that range. With respect to the molecular weight, the reference teaches that the molecular weight (of hydroxyethyl cellulose which is explicitly defined) is at least 100,000, thus reading on the claimed molecular weight. With respect to the

Art Unit: 1755

polyethylene oxide, as defined above, this component is obvious and the molecular weight of this component would have also been obvious because Sasaki teaches that polyethylene oxide, as a water soluble polymer for polishing compositions, is known to have a molecular weight of 100,000 (the same molecular weight defined in the primary reference). In view of this, one reading the primary reference would have appreciated the use of any water soluble polymer (known in polishing compositions) having the molecular weight defined therein obvious. The teachings that the water soluble polymers may be used in combination (see primary reference), thus makes the claimed combination obvious. Finally, with respect to instant claim 2, the primary reference implies that the abrasive is highly pure, thus reading on this limitation

Claims 1-5 are rejected under 35 U.S.C. 103(a) as obvious over Sasaki in view of Inoue et al. (672).

Sasaki teaches in column 21, line 9-column 22, line 45 and the claims, a composition comprising silica (claimed amount), ammonia, water and at **least one** water soluble polymer (20-1000 ppm). Polyethylene oxide and hydroxypropyl cellulose are specifically defined as the water soluble polymeric material. The molecular weight of the polymer is also defined.

Although the primary reference fails to literally define hydroxyethyl cellulose, this material is a known cellulose derivative water soluble polymer, as shown by the secondary reference, and the substitution of one water soluble cellulose derivative (hydroxyethyl cellulose) for another (hydroxypropyl cellulose as in the case of the primary reference) is obvious and well within the scope of the skilled artisan. In addition, the secondary reference teaches the functional equivalence between hydroxyethyl cellulose and hydroxypropyl cellulose in polishing

Art Unit: 1755

compositions and the substitution of functional equivalent materials is also well within the scope of the skilled artisan. With this (hydroxyethyl cellulose) being obvious, the primary reference clearly implies that a combination of water soluble polymers can be used, thus making the claimed combination obvious. With respect to the amounts, since the above combination is obvious, the individual amounts must fall within the primary reference range for the entire water soluble polymer, thus as can be seen the individual amounts can fall within the claimed range. In other words, if the total polymer concentration is to be within the reference range, this suggests that the individual amounts can be any and all amounts as long as the total amount is within that range. With respect to the molecular weight, the reference teaches that the molecular weight (of polyethylene oxide which is explicitly defined) is at least 100,000, thus reading on the claimed molecular weight. With respect to the hydroxyethyl cellulose, as defined above, this component is obvious and the molecular weight of this component would have also been obvious because Inoue et al. teaches that hydroxyethyl cellulose, as a water soluble polymer for polishing compositions, is known to have a molecular weight of 100,000 (the same molecular weight defined in the primary reference). In view of this, one reading the primary reference would have appreciated the use of any water soluble polymer (known in polishing compositions) having the molecular weight defined therein obvious. Finally, with respect to instant claim 2, the primary reference implies that the abrasive is highly pure, throughout the disclosure, thus reading on this limitation.

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1755

The ODP rejections have been withdrawn because the copending claims are silent with respect to the amounts and molecular weights of the hydroxyethyl cellulose and polyethylene oxide. However, if the claims are amended to remove the new matter, as defined above, the ODP rejection can be reinstated.

In view of the teachings as set forth above, it is still the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

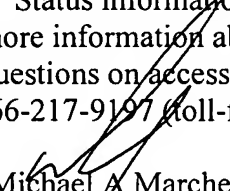
Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/05

MM


Michael A Marcheschi
Primary Examiner
Art Unit 1755